	Application No.	Applicant(s)
Notice of Allowability	10/029,698	HEATON ET AL.
	Examiner	Art Unit
	Dixomara Vargas	2859
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>Response filed on 08/23/04</u> .		
2. The allowed claim(s) is/are <u>1-31</u> .		
3. The drawings filed on 26 August 2004 are accepted by the Examiner.		
 4. ☐ Acknowledgment is made of a claim for foreign priority unance of All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	e been received. e been received in Application No	
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements
5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
 CORRECTED DRAWINGS (as "replacement sheets") must (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner' Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the state of the sheet in the sheet. 	son's Patent Drawing Review (PTO . s Amendment / Comment or in the 6 .84(c)) should be written on the drawi	Office action of ings in the front (not the back) of
7. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. Interview Summary Paper No./Mail Da 08), 7. Examiner's Amend	Patent Application (PTO-152) (PTO-413), ate ment/Comment ent of Reasons for Allowance
	,	

Application/Control Number: 10/029,698 Page 2

Art Unit: 2859

DETAILED ACTION

Allowable Subject Matter

- 1. Claims 1-31 are allowed.
- 2. The following is an examiner's statement of reasons for allowance:
 - a. With respect to claims 1 and 9, the claims have been found allowable over the prior art of record because the prior art of record fails to teach or fairly suggest a method for determining a molecular property of each constituent in a mixture of hydrocarbons in a portion of earth formation surrounding a borehole comprising the step of calculating at least one molecular property selected from the list of molecular size distributions, molecular weight distributions and carbon number distributions for the mixture from the at least one dynamic constituent in combination with the remaining limitations of the claim.
 - b. With respect to claim 18, the claim has been found allowable over the prior art of record because the prior art of record fails to teach or fairly suggest a method of well logging comprising the step of calculating at least one molecular property selected from the list of molecular size distributions, molecular weight distributions and carbon number distributions for the mixture from the at least one dynamic constituent in combination with the remaining limitations of the claim.
 - c. With respect to claim 26, the claim has been found allowable over the prior art of record because the prior art of record fails to teach or fairly suggest a method for determining a molecular property distribution in a liquid sample comprising the step of

calculating at least one molecular property selected from the list of molecular size distributions, molecular weight distributions and carbon number distributions for the liquid sample from the NMR parameter distribution in combination with the remaining limitations of the claim.

d. With respect to claims 2-8, 10-17, 19-25 and 27-31, the claims have been allowed due to its dependency on claims 1, 9, 18 and 26 above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dixomara Vargas whose telephone number is 571-272-2252. The examiner can normally be reached on Mon-Thu 7am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/029,698

Art Unit: 2859

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dixomara Vargas

Patent Examiner Art Unit 2859 Diego Gutierrez

Supervisor Patent Examiner

Page 4

Art Unit 2859